



## Fuel Cell & Hydrogen Energy Association

**June 8, 2012**

**Statement of the Fuel Cell and Hydrogen Energy Association  
House Committee on Ways and Means  
Subcommittee on Select Revenue Measures  
Hearing on a Framework for Evaluating Certain Expiring Tax Provisions**

The Fuel Cell and Hydrogen Energy Association (FCHEA) commends the Committee for making a much needed review of the framework for evaluating temporary tax provisions in the U.S. Tax Code to ensure continued efficacy and necessity. The fuel cell and hydrogen energy industry has recently begun to utilize several tax incentives that are critical to ensuring continued American leadership in this technology.

FCHEA is the trade association for the fuel cell and hydrogen energy industry. Our membership includes fuel cell materials, components and systems manufacturers; automotive companies; hydrogen producers and distributors; universities, government laboratories and agencies; and other end users.

As you may know, fuel cells and hydrogen energy technologies deliver clean, reliable power to leading edge corporate, academic and public sector users, and FCHEA members are helping to transform our energy, economic, and environmental future. Our industry has quietly become a significant source of jobs and economic growth in the U.S. over the past few years as fuel cell products gain early market traction. The prospects for growth are exceptional. This is an emerging American success story – American technology and American-made products dominate the early commercial fuel cell markets here and all over the world. This is an energy technology we don't have to buy back from the Europeans or Chinese. But we do need to foster it to achieve maximum growth and increased exports and more American jobs.

FCHEA is open to the concept of comprehensive tax reform that would simplify the tax code and look forward to working with the Committee on proposals that could be put into place after the existing credits run their course. We understand that the time is now and commend the Committee for taking tax reform and the proliferation of individual tax credits seriously.

Within the context of the review the Committee is undertaking currently, the 1603 Grant In Lieu of Taxes provision is the one that has had the most impact on the industry. The 1603 program is good policy; it is efficient, easy to use, and extremely effective in creating jobs and supporting economic development.

**1603 Grant-In-Lieu of Taxes:** This program, which allows the election of a grant instead of the tax credit under Section 48, has been very effective for the fuel cell industry. In fact, nearly all of the fuel cell sales in the United States in 2009-2011 took advantage of the program, which is much more cost efficient as a market transformation mechanism than are, even the tax credits themselves. This is simply because transactional costs are lower than for the tax credit, both for the private entity using it and for the

government. Because 1603 is lapsed in 2012, FCHEA members assume that 2012 sales in the United States will be approximately one-third lower than in 2011. This may have an impact on jobs growth, which was almost 10% over the last 2 years with the fuel cell and hydrogen industry being cited by Breakthrough Institute as one of the fastest growing clean energy sectors. The Fuel Cell and Hydrogen Energy Association suggests:

- Extending the 1603 program through 2013 so that we can be sure that capital markets are recovered and there are investors for fuel cell projects. These projects tend to be smaller than with other technologies eligible for the program and therefore will rebound more slowly than capital flow for large scale projects.

The Grant-In-Lieu is only available for PTC and ITC eligible credits and the continuation of the underlying Section 48 Fuel Cell Investment Tax Credit through its sunset of January 2016 is critical to the fuel cell and hydrogen industry. This credit was put in place in 2005 in order to spur U.S. market introduction of American made fuel cell systems. The credit of 30% up to \$1500 per half a kilowatt currently extends through 2015 and has been significantly underutilized until very recently. In some sense, this was a reflection of the enthusiasm for fuel cells, both in the industry and among policy makers that was slightly ahead of true market viability. The credit, however, has now begun to be used a bit more robustly as stationary, industrial and back up fuel cells are beginning to gain some small traction in commercial markets.

The technology remains more expensive than incumbent technologies in most cases, however, provides several public benefits that can be hard to capture, hence the necessity of a credit. First, fuel cell systems, whether using fossil fuels to generate hydrogen or renewable systems, are much cleaner than the technologies they replace. Moreover, they provide very reliable, secure and steady power, with the ability to load follow as necessary. In many applications, such as in industrial motive operations, they increase productivity, and in some power generation applications, they are upwards of 85% efficient.

The Fuel Cell and Hydrogen Energy Association suggests the following in regards to Section 48 fuel cell credit:

- Put into place a tiered system that would make the credit most robust for more efficient systems. This would move toward performance based credits, which we feel are necessary in a reformed environment
- Delineate how the credit is calculated for motive operations such as industrial fork trucks and other motive equipment. H.R. 1659 and S.1417, the Industrial Fuel Cell Vehicle Act is a modification of the existing credit to allow them to more smoothly apply to the motive market

**Section 30C Hydrogen Infrastructure Credit:** While the Alternative Fuel Infrastructure Credit expires in the time frame being considered by this Committee, the Hydrogen Infrastructure credit does not expire until December of 2014. This credit was also initiated in 2005 and has existed at various levels for several years with a current expiration date of December 31, 2014. This credit is for all alternative fueling infrastructure and is currently capped at \$30,000 per system, regardless of whether it's an ethanol refueling, natural gas refueling, or hydrogen refueling system. This level of funding is robust for some

systems and negligible for others, particularly hydrogen, refueling for which can cost upwards of \$1,000,000 and even more with onsite reforming. This cost is expected to come down significantly but not without volume, which will be assisted by a useful tax credit. The Fuel Cell and Hydrogen Energy Association suggests:

- Increase the cap for hydrogen systems significantly or eliminate the cap for all refueling property so that the relative benefit is the same for all types of infrastructure. This will encourage an “all of the above” approach to alternative fuel vehicles and infrastructure and allow locales to decide on their approach based on their unique needs and resources.
- Include installations for material handling fuel cell equipment, such as fork trucks in warehouses, since these systems are precursors to a large scale refueling infrastructure and can help in early stage build out of such infrastructures.
- Extend the credit through 2016 to line up with the fuel cell tax credit and to better reflect the commercial realities of the fuel cell vehicle market, which isn’t expected to start selling commercially until 2014-2015, and even then at fairly small numbers.

#### **Section 30B Fuel Cell Vehicle Tax Credit:**

While this credit does not expire, we would be remiss in not pointed out that the credit was reduced in 2010, a reduction that was written into the original EPACT 2005 statute, bringing the core credit from \$3000 to \$1500. This reduction, written in 2005, was premised on the idea that fuel cell vehicles would be commercially available. Unfortunately, like other fuel cell systems, fuel cell vehicles are not being widely purchased and commercial introduction is not planned until 2014-2015. The Fuel Cell and Hydrogen Energy Association suggests:

- The credit revert to the original amount written into the 2005 bipartisan Energy Policy Act
- Modify the credit to allow industrial vehicles to claim the credit such as in H.R. 1659 and S.1417.
- The credit be extended until 2016 or until tax reform has occurred and we have developed more simplified and technology agnostic means by which to ensure continued American leadership in fuel cell technology.

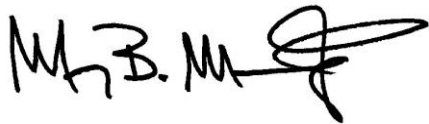
**Section 25D Residential Fuel Cell Tax Credit:** While this credit is not due to expire until 2016, it is not, as we understand it, under the purview of this credit review; however we feel that this credit needs some modification to agree more closely with the commercial fuel cell program. This credit, which was also initiated in 2005, provides a 30% tax credit for fuel cells used in residential property up to a cap of \$500 per half kilowatt. As with several others mentioned above, the credit was extended in the TARP bill in 2008 through 2016. It, too, has been underutilized to date; in fact, the FCHEA knows of only a handful of sales to the residential market to in the last 7 years. Again, excitement about the use of fuel cells among the industry and policymakers, overshadowed the developmental reality. The Fuel Cell and Hydrogen Energy Association suggests:

- Increase the cap for the section 25d fuel cell credit along the same lines as the credit currently available to business purchasers – from \$500 per half kW to \$1500 per half kW. It has never been clear why we would provide a larger credit to businesses than to individuals, particularly

since the smaller sized fuel cells tend to be a more expensive technology and most costly to interconnect on a per kW basis.

In conclusion, we again want to thank you for taking the initiative to thoroughly review tax extenders and how they are evaluated as we all begin to think about preserving American international leadership in the context of a more simplified tax system in the near future.

Regards,

A handwritten signature in black ink, appearing to read 'M.B. Markowitz', with a stylized flourish at the end.

Morry B. Markowitz  
President & Executive Director  
Fuel Cell and Hydrogen Energy Association